

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the Matter of	}	
	}	
Revision of Part 15 of the Commission's	}	
Rules Regarding Ultra-Wideband	}	ET Docket No. 98-153
Transmission Systems	}	

Reply Comments of Multispectral Solutions, Inc.

Multispectral Solutions, Inc. (MSSI) is pleased to submit these further reply comments in response to the Notice of Proposed Rule Making (NPRM), FCC 00-163, in the above referenced proceeding. These comments are specifically directed at the most recent *Ex Parte* Presentation of 16 July 2001 presented by the U.S. GPS Industry Council (GPSIC).

MSSI has carefully reviewed the GPSIC's proposed rules for the unlicensed deployment of ultra wideband devices and respectfully submits the following suggested modification:

Ultra wideband devices shall be permitted to operate on an unlicensed basis in the 5.46 to 12.0 GHz region of the spectrum, provided that:

- (a) the emissions from an ultra wideband device operating pursuant to this part shall not exceed the field strength levels specified at §15.209 of this chapter;
- (b) Out-of-band emissions (OOBE) shall not exceed field strength levels that are 35 dB below the corresponding field strength limit specified in the table in §15.209(a) of this chapter.

Comments

- (1) The GPSIC suggested an additional guard band of approximately 500 MHz from the upper edge of the restricted band (5.35 to 5.46 GHz) to 6.0 GHz. However, this suggestion appears predicated on the assumption that UWB emissions cannot be adequately spectrally filtered. As pointed out in several of MSSI's filings to the Commission on this subject, all UWB proponents have demonstrated the ability to filter their transmissions. Thus, the 35 dB suppression of OOBE suggested by GPSIC is adequate to protect the safety-of-life band at 5.46 GHz.
- (2) By the establishment of a Band Manager, any interference issues related to operation within the restricted bands of 7.25-7.75 GHz, 8.025-8.5 GHz, 9.0-9.2 GHz, 9.3-9.5 GHz and 10.6-12.7 GHz should be adequately resolved. Furthermore, several UWB companies have demonstrated the need to utilize more than 1.25 GHz of bandwidth to achieve the desired properties of their systems. By prohibiting UWB operation outside of these specific restricted bands, the maximum available bandwidth would be less than 1.25 GHz.

- (3) The development of commercially viable UWB equipment in the 5.46 to 12.0 GHz band, together with the demonstrated lack of interference to systems operating within the five restricted bands contained therein; should permit the FCC at a later date to consider the extension of available UWB spectrum from 5.46 - 12.0 GHz to 3.1 - 18.0 GHz.
- (4) Finally, the GPSIC recommendation for the establishment of an industry consortium to "address claims regarding interference from an ultra wide-band operator or operators into an authorized radio service operator (sic)" appears to be adequately handled by the establishment of a Band Manager. A requirement for mandatory membership in such a consortium would be an unprecedented action by the FCC, and one which would have a negative effect on the advancement of UWB technology.

Respectfully submitted,



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July 20, 2001